SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
0 /155,656	11/22/93	KURUMIDA	T 862. 11

HONG,S   EXAMINER

24M1/1228
FITZPATRICK, CELLA, HARPER & SCINT
277 PARK AVE.
NEW YORK, NY 10172

ART UNIT	PAPER NUMBER
2412	9

DATE MAILED: 12/28/95

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

3/30/95
3/17/95

☑ This application has been examined   ☑ Responsive to communication filed on _8/25/95_   ☑ This action is made final.

A shortened statutory period for response to this action is set to expire ___3___ month(s), ___0___ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned.   35 U.S.C. 133

Part I   THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☑ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☑ Notice of Art Cited by Applicant, PTO-1449. _1 sheet_
4. ☐ Notice of Informal Patent Application, Form PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

Part II   SUMMARY OF ACTION

1. ☑ Claims ___43 – 65___ are pending in the application.

   Of the above, claims ___NONE___ are withdrawn from consideration.

2. ☑ Claims ___1 – 42___ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☑ Claims ___43 – 65___ are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☑ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).

12. ☑ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☑ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

Part III   DETAILED ACTION

1.   This action is responsive to communications: amendment, filed 8/25/95, to the

application, filed on 11/22/93; information disclosure statements, filed 3/30/94 and 3/17/95.

2.   In the amendment, claims 1-42 have been cancelled and claims 43-65 have been

added. Accordingly, claims 43-65 are pending in the case. Claims 43 and 54 are

independent claims.

3.   The rejections to claims 1 to 26, 28 to 34, and 36 to 42 under 35 U.S.C. § 112,

second paragraph, as being indefinite have been withdrawn, since the claims have been

cancelled.

4.   The rejections to claims 1, 2, 3, 4, 5, 14, 15, 16, 17, 18, 27 and 35 under 35 U.S.C.

§ 102(e) as being anticipated by Cao, U.S. Pat. No. 5,280,576, 1/18/1994 (filed on

12/24/1991), 395/150 have been withdrawn, since the claims have been cancelled.

5.   The rejections to claims 6 to 13, 19 to 26, 28 to 34 and 36 to 42 under 35 U.S.C.

§ 103 as being unpatentable over Cao, U.S. Pat. No. 5,280,576, 1/18/1994 (filed on

12/24/1991), 395/150 have been withdrawn, since the claims have been cancelled.

Priority

6.   Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers

have been placed of record in the file.

Drawings

7.   This application has been filed with informal drawings which are acceptable for

examination purposes only. Formal drawings will be required when the application is

allowed.

Specification

8.   The objection to the Abstract for using improper language and format has been

withdrawn in view of the substitute Abstract submitted in the amendment.

9.   Examiner requests that Applicant continue reviewing the specification for informalities

including typographical and grammatical errors.

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that
form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (e) the invention was described in a patent granted on an application for patent by
> another filed in the United States before the invention thereof by the applicant for
> patent, or on an international application by another who has fulfilled the requirements

of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
thereof by the applicant for patent.

11.   Claims 43-49 and 54-60 are rejected under 35 U.S.C. § 102(e) as being anticipated by

Cao, U.S. Pat. No. 5,280,576, 1/18/1994 (filed on 12/24/1991), 395/150.

As per newly added independent claim 43, Cao discloses **storing positions of first**

outline points (Col 2, line 58, "...describes the shaped of the character by means of sets of

control points that define line of curve segments... Each control point is specified as

Cartesian (i.e.,(x,y)) coordinate."); **for each point individually, storing second**

information for deciding positions of second outlines points (col.3, line 4, "curve segment

12-2 is defined by ...a control point 14-2 positioned at one end ..., a control point 14-5

positioned at the opposite end .., and two middle control points" shows that in addition to the

position information, the second information used for the weight adjusting is given to each

point.); **inputting desired weight of an outline to be generated** (col 1, line 11, "a font

designer desires to modify a particular font ... have a different weight"); **deciding a position**

of each of the second outline points having the desired weight based on the first and

second information (col 3, line 18, "...FIGS. 1, 2 and 6 ... adjust the weight of character 10

to form a new character 18 by adjusting control points 14 ..."); and **generating an outline**

using the second outline points (FIG 6 shows the outline at a new weight that was generated

from the outline of FIG. 1, and therefore inherently showing the generation means).

As per dependent claim 44, Cao discloses **judging whether or not each points has**

non-zero second information and changing the position of the points having non-zero

information (Fig.10 shows the final shape of the newly formed character 42 from character

40. Although the weight of the character 42 has been decreased (i.e., thinned), character 42

shows that the vertical height stays the same. In other words, only the control points that did

not alter the vertical height have been adjusted.).

As per dependent claims 45 and 46, Cao discloses **an output means comprising a**

printer for outputting the patterns (col.2, line 43, "...Interpress enables a printer ...to print

a character, such as character 10" inherently shows outputting to a printer.).

As per dependent claims 47, Cao discloses **the second information indicating**

relative positions of the second outline points relative to the positions indicated by the

first information at different weight (col.3, line 1, "...line segment 12-1 is defined by two

points, 14-1 and 14-2 ....curve segment 12-2 is defined by four control points..." shows that

the second information contain relative position information need for adjusting to a different

weight, and col.3, line 19, "adjusts the weight of character 10 to form a new character 18 by

adjusting control points 10 to create the new control points 20" shows that the adjustment

occurs with respect to the second information.).

As per dependent claim 48, Cao discloses **deciding the position of the second outline points by using the first information, the second information and predetermined function** (col.3, line 26, "the method first determines an adjustment to end control points ..., then determines an adjustment to middle control points" shows that in addition to the first information (i.e., coordinate position), the second information (i.e., relative positions such as end or middle points) and a predetermined function (col.3, lines 35-55) are used.).

As per dependent claim 49, Cao discloses **the predetermined function being changed based on the desired weight** (col.2, lines, "depending on whether the weight of the character is to be made bolder or lighter ...changes features of the character").

Claims 54-60 are for methods performed by the apparatus of claims 43-49, and are similarly rejected under the same rationale.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under

this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

13.   Claims 50-53 and 61-65 are rejected under 35 U.S.C. § 103 as being unpatentable over Cao, U.S. Pat. No. 5,280,576, 1/18/1994 (filed on 12/24/1991), 395/150.

As per dependent claim 50, Cao does not explicitly disclose **the second information indicating plural positions of second outline points respectively corresponding to plural values of weight.** However, as explained in claim 49 above, Cao does show that the positions of the outline points change according to different weights of the character. Further, as explained in the rejection of claim 46 above, Cao's fonts system was to be used for printers. Given that, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have pre-calculated and stored in the memory all the position data of the points corresponding to plural values of weight, since it would saved a great deal of time in actual outline generation as the time needed for calculation of the movement would have been eliminated.

As per dependent claims 51 and 52, Cao does not explicitly disclose that **the second information indicates an allowable amount of movement** of each of the first outline points (claim 51) **which is based on whether or not a resultant second outline point intersects another outline** (claim 52). However, including such information would have been obvious

to a person of ordinary skill in the art at the time the invention was made, since Cao provided

the motivation. Cao in Fig.7 showed character 42 adjusted from character 40 according to a

new weight. In Fig.7 Cao showed the bottom curve of "j" where the width has been thinned

according to the new weight. From the figure, one of ordinary skill in the art would have

seen that the outlines forming the bottom curve of "j" was in danger of touching each other.

Therefore, the information containing the allowable amount of movement would have helped

to avoid unwanted intersecting of the outlines of the new character.

As per dependent claim 53, Cao does not disclose **the amount of movement based on**

whether or not the first outline emerges from a body frame of the pattern. However, it

would have been obvious to a person of ordinary skill in the art at the time the invention was

made to have included the allowable amount of movement information based on the body

frame of the pattern, since Cao provided the motivation. In column 5, Cao pointed out

"although lightened characters have the same general shape as the original characters

...[they]..would lie along a different baseline (line 8)." In other word, as shown by Cao in

Fig.7, the lighted character had a shorter vertical body frame. Given that, it is inherent that

for the thickened characters the body frames would have been emerged outside of the vertical

frame. Therefore, the restricting the movement based on the body frame would have ensured

that the newly formed characters do not have larger vertical frames.

As per dependent claim 65, although Cao does not show that **the first and second information are stored in a read only memory**, such modification would have been obvious to a person of ordinary skill in the art, since Cao disclosed that the system was used for a printer and it was well known technology to store fonts information in ROMs of the printers.

Claims 61-64 are for methods performed by the apparatus of claims 50-53, and are similarly rejected under the same rationale.

Response to Amendment

14.   Applicant's arguments filed 8/25/95 have been fully considered but they are not deemed to be persuasive.

As stated before, previously pending claims 1-42 have been cancelled and new claims 43-65 have been added. Accordingly, the previous rejections of claims 1-42 have been withdrawn.

Applicant argues that the newly added claims 43-65 now overcomes the prior art of Cao because in the claimed invention, "when the outline of the pattern needs to be changed …the thickness at each first outline point can be changed independently" and in Cao, Applicant argues that "the thickness of every portion of the pattern is changed in the same way." First of all, this specific limitation has not been addressed in the rejections above, since the claims did not explicitly address the limitation. Nevertheless, after considering the

argument, Examiner stands to differ with Applicant's argument that Cao changes the

character patterns for all portions in the same way. Cao employs two step method in the

invention. In column 2, lines 17-26, Cao uses the first procedures to adjusted the portions a

character, and thus, up to this point Applicant's assertion is correct. However, in line 24,

Cao says that "the second procedure corrects for the undesired changes induced by the first

procedures." Turning now to Figure 10, the resulting character 42 shows that the portions of

the character pattern are not adjusted the same way. And, in column 10, line 16, Cao shows

that "character 42 is shifted to the left ...by translating its control points..." for the individual

adjustment of the thickness.

Conclusion

15.   Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS
ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the

extension of time policy as set forth in 37 C.F.R. § 1.136(a).

        A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL
ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION.
IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE
MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT
MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED
STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL
EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY
EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED
FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL
THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS
FROM THE DATE OF THIS FINAL ACTION.

16.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Hong whose telephone number is (703) 308-5465. The examiner can normally be reached on Monday-Friday from 8:00 AM-5:30 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (703) 305-9701. The fax phone number for this group is (703) 305-9724.

        Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Stephen Hong

Patent Examiner

December 21, 1995

ALMIS R. JANKUS
PRIMARY EXAMINER
GROUP 2400